IN THE CLAIMS

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims:

1-14. (Canceled)

15. (Currently Amended) The method of ~~diagnosing a disease related to endometriosis of~~ claim [[1]] 30, ~~which comprises the steps of:~~ wherein measuring the amount of HRF protein includes:

(a) contacting a ~~biological~~ sample from a subject with a support on which a first antibody has been immobilized, the first antibody ~~recognizing~~ being capable of binding to [[an]] a first epitope of HRF protein ~~has been immobilized~~;

(b) after step (a), washing the support ~~with which the biological sample has been contacted in the step (a)~~ with a reagent so as to remove unbounded components;

(c) contacting a second antibody ~~recognizing a different epitope of HRF protein from the first antibody, which has been labeled,~~ with the support washed in [[the]] step (b), the second antibody being capable of binding to a second epitope of HRF protein and including a labeling substance; and

(d) measuring a ~~bound label or a free label on the support~~ signal of the labeling substance; and

~~(e)~~ wherein comparing the amount of HRF protein includes comparing the ~~label amount~~ signal measured in ~~the~~ step (d)~~, as an indicator of the HRF protein level, with the result of a normal biological sample~~ with that of the control, the signal measured in step (d) reflecting the amount of HRF protein in the sample from the subject in step (a)~~; and~~

~~(f) employing a significantly higher HRF protein level compared with that of the normal biological sample as an indicator showing a disease related to endometriosis or the degree of its risk.~~

16. (Canceled)

17. (Currently Amended) The method of ~~diagnosing a disease related to endometriosis of~~ claim 15, wherein <u>at least one of</u> the <u>first and second antibodies</u> are ~~antibody is an antibody recognizing an HRF protein,~~ obtained by using~~, as an immunizing antigen,~~ a peptide containing a sequence of 5 to 20 amino acid residues selected from the amino acid sequence at positions 90 to 130 of SEQ ID NO: 2<u>, the peptide being an immunizing antigen</u>.

18-29. (Canceled)

30. (New) A method of diagnosing endometriosis or a disease caused by endometriosis in a subject, comprising:

measuring an amount of histamine-releasing factor (HRF) protein in a sample from the subject; and

comparing the amount of HRF protein in the sample from the subject with an amount of HRF protein in a control,

wherein an increase in the amount of HRF protein in the sample from the subject as compared to the amount of HRF protein in the control (1) indicates endometriosis or a disease caused by endometriosis in the subject or (2) correlates with risk for endometriosis or a disease caused by endometriosis in the subject.

31. (New) The method of claim 30, wherein the control is a sample from a subject that (1) does not have endometriosis or a disease caused by endometriosis or (2) is not at risk for endometriosis or a disease caused by endometriosis.